

WEST WING 1st FLOOR MECHANICAL PLAN

SCALE = 1:100

## WEST WING 2nd, 3rd, AND 4th FLOOR MECHANICAL PLAN

SCALE = 1:100

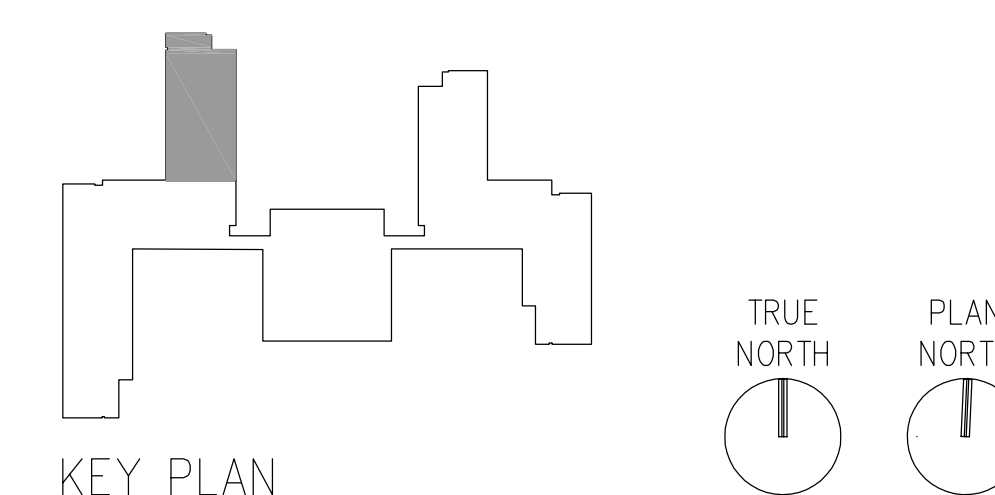
GENERAL NOTES:

1. PROVIDE ACCESS DOORS AT ALL CONTROL DAMPERS.
2. COMBINATION SMOKE AND FIRE DAMPERS SHALL BE INSTALLED AT ALL DUCT PENETRATIONS THROUGH FIRE RATED WALLS AND OTHER ASSEMBLIES AND SHALL BE INTERLOCKED WITH THE FIRE ALARM SYSTEM.
3. REFER TO ARCHITECTURAL PLANS FOR PTAC UNIT CONTROL PANEL LOCATIONS (LEFT SIDE OR RIGHT SIDE).
4. MANUAL BALANCING DAMPERS SHALL BE INSTALLED AT ALL INDIVIDUAL DUCT TAKEOFFS AND ALL DUCT BRANCH TAKEOFFS FOR ALL SUPPLY, RETURN, AND EXHAUST DUCTS. DAMPERS IN REGISTERS SUITABLE FOR BALANCING SHALL BE CONSIDERED BALANCING DAMPERS.
5. ROOM NUMBERS ARE 2XXX FOR 2nd FLOOR, 3XXX FOR 3rd FLOOR, AND 4XXX FOR 4th FLOOR.

**KEYED NOTES:**

- ① CUH-2.2 IS ON 2nd FLOOR, CUH-2.3 IS ON 3rd FLOOR, CUH-2.4 IS ON 4th FLOOR.
- ② SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR LOCATION.
- ③ FIELD VERIFY LOCATION OF EXISTING DUCTS TO BE CONNECTED TO.
- ④ THERMOSTAT, H-O-A SWITCH, AND SPEED CONTROLLER FOR EXHAUST FAN SHALL BE LOCATED IN A LOCKABLE ENCLOSURE ON THE 4TH FLOOR.

EQUIVALENT ENGLISH DUCT SIZES					
METRIC (mm)	ENGLISH (IN)	METRIC (mm)	ENGLISH (IN)	METRIC (mm)	ENGLISH (IN)
100	4	1350	54	2640	104
150	6	1400	56	2690	106
200	8	1450	58	2740	108
250	10	1500	60	2790	110
300	12	1575	62	2840	112
350	14	1625	64	2890	114
400	16	1675	66	2940	116
450	18	1725	68	2990	118
500	20	1775	70	3050	120
550	22	1825	72	3100	122
600	24	1875	74	3150	124
650	26	1925	76	3200	126
700	28	1975	78	3250	128
750	30	2025	80	3300	130
800	32	2075	82	3350	132
850	34	2125	84	3400	134
900	36	2175	86	3450	136
950	38	2225	88	3500	138
1000	40	2275	90	3550	140
1050	42	2325	92	3600	142
1100	44	2375	94	3660	144
1150	46	2425	96	3710	146
1200	48	2475	98	3760	148
1250	50	2525	100	3810	150
1300	52	2580	102	3860	152




I hereby certify this drawing was prepared by me or under my direct supervision and that I am a duly registered architect under the laws of the State of Minnesota.

0 For: Mead & Hunt  
By: *Richard E. Low-Bell*  
Title: Project Manager  
Registration No: 22452

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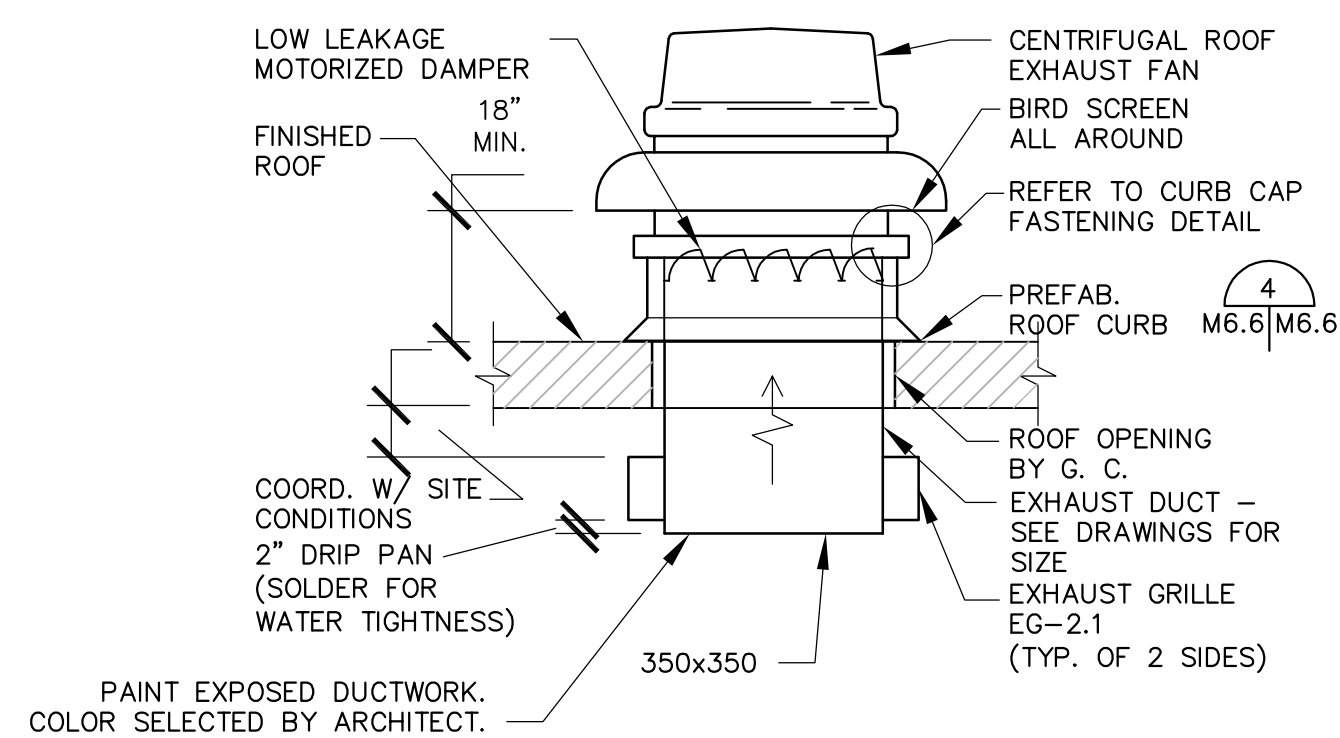
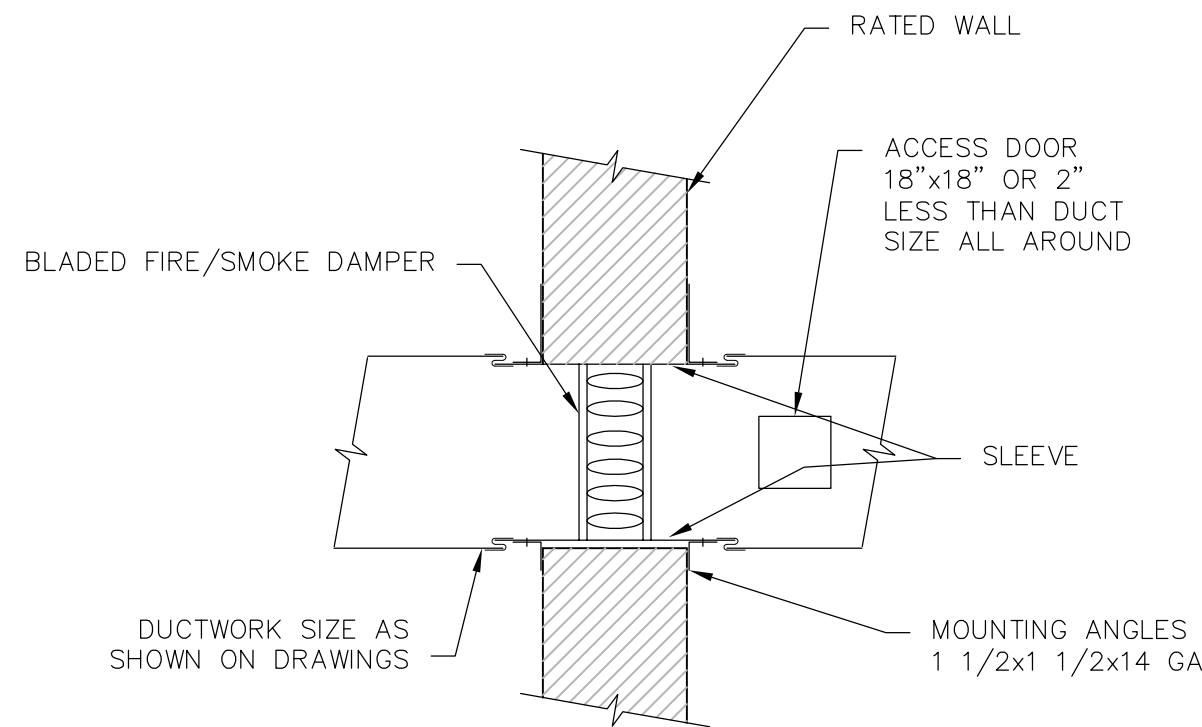
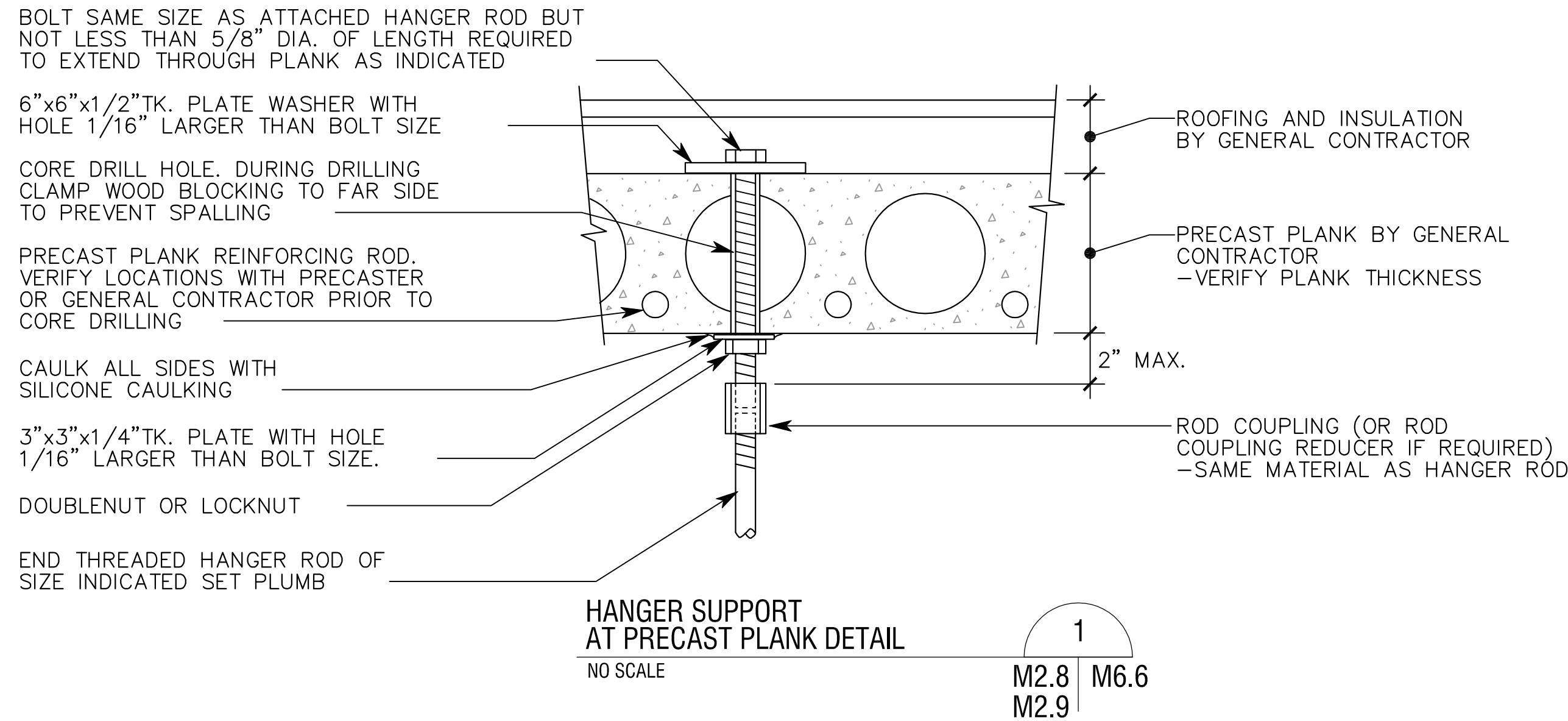
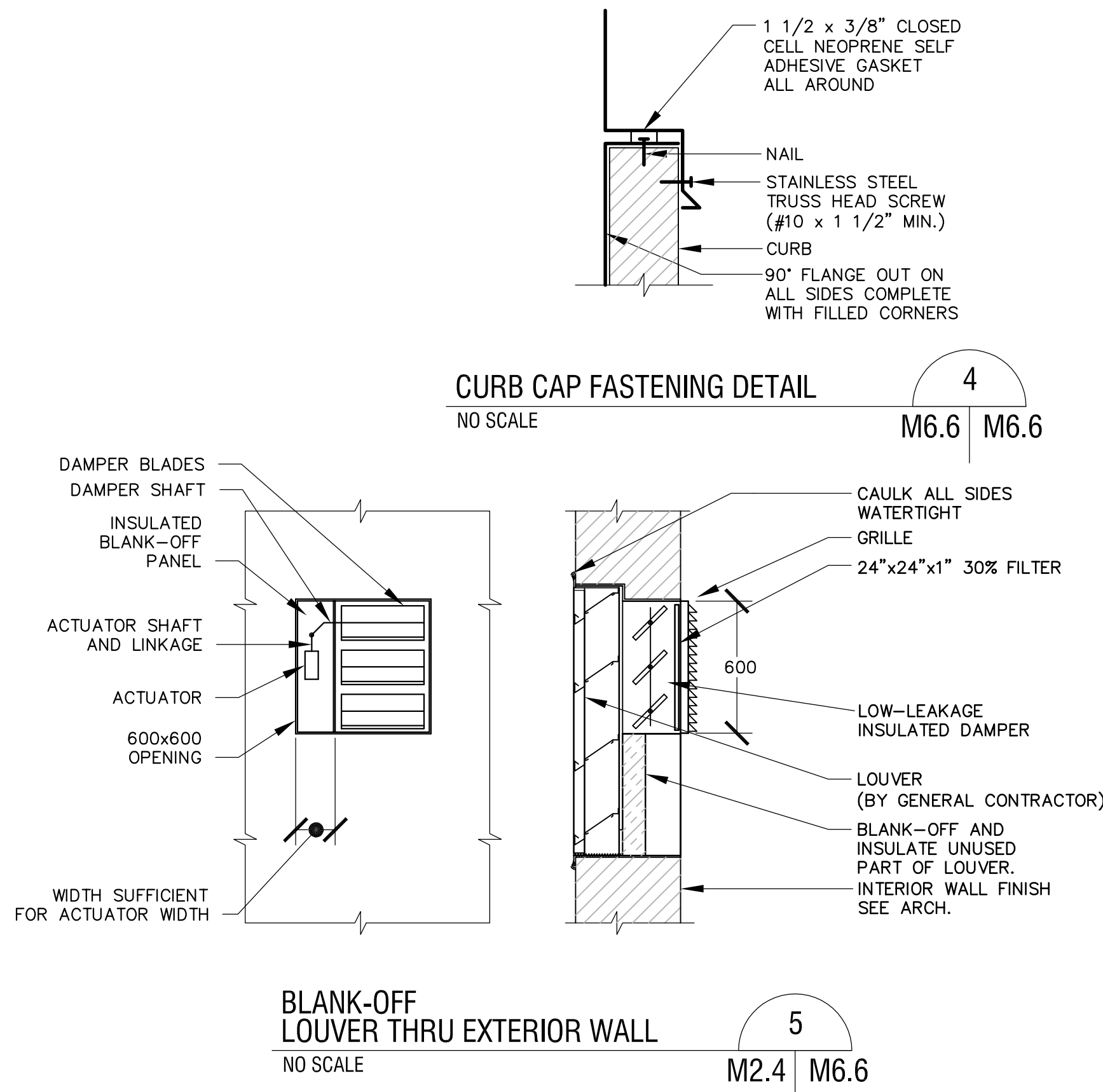
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ALL SCALES SHOWN ARE BASED ON A STANDARD DRAWING SIZE OF 28" x 40" OR METRIC DRAWING SIZE OF 841mm x 594mm. IF ANY OTHER SIZE DRAWINGS ARE FURNISHED OR PLOTTED THE CONTRACTOR SHALL ADJUST THE SCALES ACCORDINGLY. THE CONTRACTOR SHALL ALSO ADVISE HIS SUB-CONTRACTORS OF THE ABOVE.

Revisions				
Symbol	Descriptions	Date	Approved	
Architect:	Engineer:	U.S. ARMY ENGINEER DISTRICT		
ARCHITECTURAL ALLIANCE	MEAD & HUNT	CORPS OF ENGINEERS		
MINNEAPOLIS, MINNESOTA	MADISON, WISCONSIN	OMAHA, NEBRASKA		
Designed by:	MINNEAPOLIS-ST. PAUL AFR		MINNESOTA	
KAS	CONSOLIDATED LODGING FACILITY - PHASE FOUR -			
Drawn by:	1st, 2nd, 3rd, AND 4th FLOOR MECHANICAL PLANS			
SDO				
Checked by:				
KAS				
Reviewed by:	Plot Scale Ratio:	Date:	Sheet	
 REC	Design File: 10058m204.dwg	DECEMBER 2003	number	
Submitted by:	Spec. No.:	Drawing Code:		
	W9128F-04-B-0002			
	Contract No.:	AF 721-315-04	M2.4	
	W9128F-04-C-XXXX			

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I hereby certify this drawing was prepared by me or under my direct supervision and that I am a duly registered architect under the laws of the State of Minnesota.

For: Mead & Hunt  
By: *[Signature]*  
Title: Project Manager  
Registration No: 22452

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Revisions			
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Architect: ARCHITECTURAL ALLIANCE MINNEAPOLIS, MINNESOTA		Engineer: MEAD & HUNT MADISON, WISCONSIN	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS OMAHA, NEBRASKA
Designed by: KAS	MINNEAPOLIS-ST. PAUL AFR MINNESOTA		
Drawn by: JET	CONSOLIDATED LODGING FACILITY - PHASE FOUR - MECHANICAL DETAILS		
Checked by: KAS			
Reviewed by: REC	Plot Scale Ratio: Design File: 10058m606.dwg	Date: DECEMBER 2003	Sheet reference number:
Submitted by:	Spec. No.: W9128F-04-B-0002	Drawing Code:	M6.6
	Contract No.: W9128F-04-C-XXXX	AF 721-315-04	

CABINET UNIT HEATER (CUH) SCHEDULE																													
MARK	MANUFACTURER, MODEL NUMBER	FLOWRATE		EAT		LAT		MEDIA TYPE	HEATING						CABINET SIZE						FAN MOTOR			ELECTRICAL (VOLT/PHASE)	① MOUNTING			LOCATION	REMARKS
									CAPACITY		FLOWRATE				DEPTH		LENGTH		HEIGHT						HEIGHT				
		L/S	CFM	C°	F°	C°	F		KW	MBH	L/S	GPM	kg/S	PPH	MM	IN	MM	IN	MM	IN	KW	HP	RPM		M	FT	TYPE		
CUH-2.1	Q-MARK, CDF-558	118	250	7.2	45	33.9	93	ELECTRIC	5	17.1	-	-	-	-	254	10	914.4	36	670	26 3/8	-	-	-	208/1	CLG	CLG	C	1159	②③
CUH-2.2	Q-MARK, AWH-4404	47.2	100	7.2	45	22.8	73	ELECTRIC	3	10.2	-	-	-	-	89	3.5	365	14	464	18	-	-	-	208/1	0.25	0.75	S	2159	②
CUH-2.3	Q-MARK, AWH-4404	47.2	100	7.2	45	22.8	73	ELECTRIC	3	10.2	-	-	-	-	89	3.5	365	14	464	18	-	-	-	208/1	0.25	0.75	S	3159	②
CUH-2.4	Q-MARK, AWH-4404	47.2	100	7.2	45	22.8	73	ELECTRIC	3	10.2	-	-	-	-	89	3.5	365	14	464	18	-	-	-	208/1	0.25	0.75	S	4159	②
CUH-2.5	Q-MARK, CU945	12700	500	7.2	45	26.7	80	ELECTRIC	10	34.1	-	-	-	-	254	10	1194	47	670	26 3/8	-	-	-	208/1	0.5	1.5	W	103	②
MOUNTING TYPES		REMARKS: ① MOUNTING HEIGHT SHALL BE FROM FINISHED FLOOR TO BOTTOM OF UNIT. ② PROVIDE DISCONNECT SWITCH AND INTEGRAL TAMPER RESISTANT THERMOSTAT. ③ CEILING MOUNTED UNITS SHALL BE EQUIPPED WITH ACCESSORIES REQUIRED FOR CEILING TYPE.																											
R S C F W		RECESSED SEMI-RECESSED CEILING FLOOR STANDING WALL																											

AIR OUTLETS AND INLETS SCHEDULE																	
MARK	MANUFACTURER, MODEL NUMBER	APPLICATION	INLET/ OUTLET	TYPE	MTG. SYST.	DAMPER	OVERALL SIZE		NECK SIZE		CONSTRUCTION MATERIAL	ACCESSORIES	① MOUNTING HEIGHT		LOCATION	REMARKS	
							MM	IN	MM	IN			M	FT			
CD-2.1	CARNES, SKTA20	SUPPLY	1	9	1	OB	610x610	24x24	300x300	12x12	ALUM.	EQUALIZING DEFLECTOR	—	CLG.	CORR.	TWO-WAY BLOW PATTERN	
EG-2.1	CARNES, RTLA	EXHAUST	3	3	4	N	250x350	8x14	150x300	6x12	STEEL	—	DUCT	DUCT	103 STAIR	—	
ER-2.1	CARNES, RTLA	EXHAUST	2	3	2	OB	203x203	8x8	152x152	6x6	STEEL	—	—	CLG.	REFER TO PLAN	—	
SR-2.1	CARNES, RTLA	SUPPLY	2	3	2	OB	203x203	8x8	152x152	6x6	STEEL	—	—	CLG.	REFER TO PLAN	—	
SG-2.1	CARNES, RSLA FILTER	SUPPLY	3	3	3	N	650x650	26x26	600x600	24x24	STEEL	—	1.7	5.5	103 STAIR	TO FIT 24"x24"x1" FILTER	
INLET/OUTLET		TYPE								MOUNTING SYSTEM				DAMPER LEGEND			
1	DIFFUSER	1	SINGLE DEFLECTION				8	EGGCRATE		1	T-BAR CEILING		B	BUTTERFLY		N	
2	REGISTER	2	DOUBLE DEFLECTION				9	LOUVERED		2	PLASTER/CONCRETE CEILING		G	GRAVITY		OB	
3	GRILLE	3	FIXED BLADE				10	HOODED		3	PLASTER/MASONRY WALL		MP	MOTOR OPERATED-PNEUMATIC		PB	
4	LOUVER	4	PERFORATED				11	DOOR TRANSFER		4	EXPOSED DUCTWORK		ME	MOTOR OPERATED-ELECTRIC			
5	PENTHOUSE	5	LINEAR				12	BRICK		5	METAL PANEL WALL						
6	VENT	6	SLOT				13	PUNKAH		6	ROOF						
7		7	DRUM														
REMARKS:																	
① MOUNTING HEIGHT SHALL BE FROM FINISHED FLOOR TO TOP OF OPENING.																	

PACKAGED TERMINAL AIR CONDITIONER (PTAC) SCHEDULE															
MARK	MANUFACTURER, MODEL NUMBER	COOLING CAP.				HEATING CAP.		SUPPLY AIR FLOW		MINIMUM OUTDOOR AIR FLOW		ELECTRICAL (VOLTS/ PHASE)	ACCESSORIES	LOCATION	REMARKS
		KW	BTUH	COP	EER	KW	BTUH	L/S	CFM	L/S	CFM				
PTAC-1	McQUAY, SES-07	2.0	7000	3.4	11.6	2.0	6820	113.26	240	16.5	35	208/1	1, 5, 6, 7, 8, 9,	REFER TO PLAN	①
ACCESSORIES															
1	POWERED OUTSIDE AIR VENT AND DAMPER				7	EXTRUDED ANODIZED ALUMINUM ARCHITECTURAL OUTDOOR GRILLE				13	HARD-WIRE JUNCTION BOX				
2	REMOTE WALL/DOOR/CEILING STAT				8	CORNER/END/FLANGE BATTLES				14	POWER DISCONNECT SWITCH				
3	REMOTE TEMPERATURE SENSOR				9	CONDENSATE DRAIN				15	CIRCUIT BREAKER				
4	CONDENSATE REMOVAL HEAT PUMP				10	KEY LOCK CONTROL COVER				16	FUSE HOLDER				
5	SUB-BASES ②				11	LEVELING LEGS				17	HYDRONIC HEAT				
6	WALL SLEEVES				12	ADJOINING ROOM DUCT TRANSITION				18	HYDRONIC HEAT CONTROL VALVES				

MARK	MANUFACTURER, MODEL NUMBER	TYPE	AIR FLOW		ESP		MOTOR		FAN RPM	DRIVE TYPE	ELECTRICAL (VOLTS/ PHASE)	ACCESSORIES	1 INTERLOCK/W	MTG. HGT.		OPENING		LOCATION	REMARKS
			L/S	CFM	Pa	IN WG	KW	HP						M	FT	MM	IN		
EF—2.3	COOK 120C10D	2	141	300	93	0.375	0.12	1/6	1041	DIRECT	120/1	1,9,13,14	T—STAT	ROOF	ROOF	610 SQ.	15.5 SQ	ROOF	STAIR VENT
TYPE												ACCESSORIES							
1	SIDEWALL PROPELLER				7	TUBE AXIAL						1	LOW—LEAKAGE MOTORIZED DAMPER					8	HANGING ISOLATORS
2	ROOFTOP CENTRIFUGAL				8	VANE AXIAL						2	WEATHERHOOD					9	MANUFACTURER'S ROOF CURB
3	SIDEWALL CENTRIFUGAL				9	UPBLAST AXIAL						3	WALL COLLAR					10	INLET/OUTLET FLANGES
4	INLINE CENTRIFUGAL				10	ROOFTOP HOODED AXIAL						4	INLET WIRE GUARD					11	SPECIAL COATING (SEE SPECIFICATIONS)
5	UTILITY CENTRIFUGAL				11	ROOFTOP HOODED CENTRIFUGAL						5	MOTOR WIRE GUARD					12	MANUFACTURER'S HOODED WALL CAP
6	CABINET				12	ROOFTOP CENTRIFUGAL UPBLAST						6	MOTOR (OSHA) WIRE GUARD					13	SPEED CONTROLLER 2
					13	OTHER (SEE SPECIFICATIONS)						7	BELT (OSHA) GUARD					14	DISCONNECT SWITCH
REMARKS:																			
1 SEE SPECIFICATION — SEQUENCE OF OPERATION.																			
2 PERMANENTLY MARK BALANCE SPEED ON CONTROLLER.																			

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	W9128F-04-B-0002			
	W9128F-04-C-XXXX			

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For: Mead & Hunt  
By: *Richard E. Crockett*  
Title: Project Manager  
Registration No: 22452

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